

Date: Monday, 5/15/2006 11:09:03 AM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: 206 L HIGH GEAR SKIDTUBE
Job Number	: 27100A		
Estimate Number	: 10522		
P.O. Number	: N/A	Part Number	: D206642441
This Issue	: 5/15/2006 S.O. No. : N/A	Drawing Number	: D2650 REV E
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: 5/15/2006 Type : LANDING GEAR	Drawing Revision	: E
Previous Run	: 27099A	Material	: N/A
Written By	: <i>SEE COMMENT BELOW</i>	Due Date	: 6/1/2006
Checked & Approved By	: <i>06.05.15</i>	Qty:	1 Um: Each
Comment	: Est Rev: H 05.10.11 Added D3429-1 per CHG004 KJ/CP/JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
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1.0	DC	DOCUMENT CONTROL
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Comment: DOCUMENT CONTROL

Photocopy bluefile and create labels per PPP D206-642-441 CHG002

See B27100 A

2.0	D2620	Bent 206 Skidtube
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Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2620 Bent Tube 3" OD *B27205 BE 06-06-14*

3.0	D2647	Cap
-----	-------	-----



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number Description Batch

1 D2647 Fwd Cap *B274842 BE 06-06-14*

4.0	LANDING GEAR 1	LANDING GEAR RESOURCE 1
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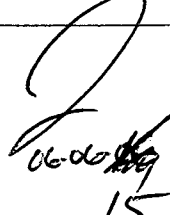
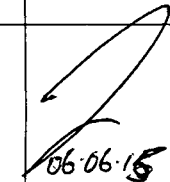
Comment: LANDING GEAR RESOURCE 1

1-Deburr Fwd edge of tube *BE 06-06-14*2-Remove ridge on inside of Fwd edge of tube as per Dwg D2650 *BE 06-06-14*

3-Weld Fwd Cap as per Dwg D2650. Use aluminum rod. Grind D2647 to fit as required.

A/R Aluminum Rod *m100660 / m18839 BE 06-06-14*4-Grind weld flush to cap on top surface only. *BE 06-06-14*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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	4.0	upon installing the drill sig, the tubing was noticed to be twisted twisted, roughly 3/16 through out the total length. 1st tube of many out of that batch.		Scrap: destroy the tube. Replace	BE 06-06-15	 06-06-15 15		 06-06-15

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

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Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 27-00A

Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description:

5-Cut aft end 138.60" from front of tube

BE 06-06-14

6-Drill pilot holes using drill jig DT8025 & DT8169 (A,B,C,D). Open to Ø0.312".

7-Drill holes for wearplates using DT 8028-7. Open to Ø 0.297".

8-Open using #6 Drill Bit

9-Open holes for Tow Ring to Ø0.625" as per Dwg D2650, D2650-7 Drilling Detail

10-Remove inner indexing ridge on aft end of skidtube as per Dwg D2650

11-Deburr and Blow out all chips from inside the tube

BE 06-06-15

5.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

BT 06-06-20

6.0

D26547

206 L Beam (Web)



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2654-7

Web

B26785

BT 06-06-20

7.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open holes to finished size as per Dwg D2650, D2650-7 Drilling Detail (without cutting fluid) BT 06-06-20

2-Countersink crossbolt spacer holes as per Dwg D2650(without cutting fluid) BT 06-06-20

3-Deburr. Blow out chips. Grind alodine off around crossbolt spacer. BT 06-06-20

4-Bond D2654-7 web in place as per QSI 015 Ensure holes line up Allow 12 Hrs. cure time before cutting

Start Date: 06-06-20 Time: 4:00

Finish Date: 06-06-21 Time: 7:00 am BT 06-06-20

A/R Sikaflex-291 M101126

Sikaflex expiry date: 06-11-01

W/O:		WORK ORDER CHANGES					
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Job Number: 27100A

Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

8.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

DP06-621

9.0

D2649

Crossbolt Spacer



Comment: Qty.: 23.0000 Each(s)/Unit Total : 23.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

23 D2649

Crossbolt spacer

B23864 BE 06-06-22

10.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Insert cross bolt spacers D2649. Weld as per QSI 004 and Dwg D2650. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

A/R Aluminum Rod

M18839 BE 06-06-22

2-Grind welds flush as per Dwg D2650. Masking Tape access to inside of the Skidtube

BE 06-06-26

3-Counterbore 5/16" x 0.750" deep as per Dwg D2650Deburr

BE 06-06-26

11.0

D2680041

Nut Plate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

1 D2680-041

Nut Plate

B24203 BE 06-06-27

12.0

CCR264SS33

Cherry Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description

Batch

2 CCR264SS3-3

Rivets

M14651 BE 06-06-27

W/O:		WORK ORDER CHANGES					
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Job Number: 27100A

Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

13.0

M7885343

Rivet



Comment: Qty.: 2.0000 Each(s)/Unit Total : 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 M7885/3-4-3

Rivets

M 19099 BE 06-06-27

14.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Install D2680-041 Nut Plate as per Dwg D2650

BE 06-06-27

15.0

QC5/9

WELD INSPECTION



Comment: WELD INSPECTION

QC9-5 PD 06-06-27 (1)

06-06-28 (1)

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat White (Ref. 4.3.5.1) as per QSI 005 4.3

Make sure Nut Plate Thread protected use paint screw

9.m 06-07-05 (1)

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

DL 06/07/06 (1)

18.0

D26483

Wearpad



Comment: Qty.: 6.0000 Each(s)/Unit Total : 6.0000 Each(s)

Pick:

Qty Part Number

Description Batch

6 D2648-3

Wearpad

3 25904

19.0

D265615

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-15

Wearshoe

B 24845

9.m 06-07-06 (1)

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

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Date: Monday, 5/15/2006 11:09:04 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 27100A

Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

20.0

D265623

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-23

Wearshoe B 24846

21.0

D265637

Wearplate



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2656-37

Wearshoe B 26366

22.0

D34291



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D3429-1

Wearpad B 24412

23.0

ALS41032130

Insert



Comment: Qty.: 60.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick:

Qty Part Number

Description Batch

60 ALS4-1032-130

Inserts M 18293

or (see QSI 017)

24.0

AN960JD10L

Washer



Comment: Qty.: 60.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick:

Qty Part Number

Description Batch

60 AN960JD10L

Washer M 18235

A-M 06-07-00 (1)

W/O:		WORK ORDER CHANGES					
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Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 27100A

Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

25.0

MS27039108

Screw



Comment: Qty.: 60.0000 Each(s)/Unit Total : 60.0000 Each(s)

Pick:

Qty Part Number

Description Batch

60 MS27039-1-08

Screw

431 M18836
78 M19551

26.0

D26511

Plug



Comment: Qty.: 22.0000 Each(s)/Unit Total : 22.0000 Each(s)

Pick:

Qty Part Number

Description Batch

22 D2651-1

Plugs

B25144

27.0

D26513

O-Ring



Comment: Qty.: 22.0000 Each(s)/Unit Total : 22.0000 Each(s)

Pick:

Qty Part Number

Description Batch

22 D2651-3

O-Rings

B23491

28.0

AN960JD416

Washer



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 AN960JD416

Washer

M11151

29.0

MS27039406

Screw



Comment: Qty.: 1.0000 Each(s)/Unit Total : 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 MS27039-4-06

Screw

M16874

a.m

06-07-06



W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

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Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 27100A

Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

30.0

D2646

Aft Cap



Comment: Qty.: 1.0000 Each(s)/Unit Total: 1.0000 Each(s)

Pick:

Qty Part Number

Description Batch

1 D2646

Aft Cap B25381

31.0

AN960JD10L

Washer



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 AN960JD10L

Washer m 18235

32.0

MS27039108

Screw



Comment: Qty.: 2.0000 Each(s)/Unit Total: 2.0000 Each(s)

Pick:

Qty Part Number

Description Batch

2 MS27039-1-08

Screw m 19551

a.m.

06-07-06

①

33.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts & wearpads as per dwg D2922. Use a drop of Sikaflex inside insert holes before installing wearpad/wearplate.

A/R Sikaflex-291

m 101193

Sikaflex expiry date:

06-11-06

2-Install O-Rings D2651-3 on plugs D2651-1 with Petroleum Jelly and install plugs as per Dwg D2650. Clean excess adhesive

3-Install MS27039-4-06 Screw as per DEO 9153

4-Inspect for foreign object per QSI 024

5-Install D2646 Aft Cap and seal with SikaflexClean excess adhesive

A/R Sikaflex-291

m 101193

Sikaflex expiry date:

06-11-06

a.m. 06-07-06

①

6-Wing Walk as per Dwg D2650-7 and QSI 005 4.4

Batch: m 101266

FC 06 07 10

①

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Design Mgr	Approval QC Inspector
			Initial Design Mgr	Action Description Design Mgr	Sign & Date			

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 06/07/24

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

Date: Monday, 5/15/2006 11:09:04 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 206 L HIGH GEAR SKIDTUBE

Job Number: 27100A

Part Number: D206642441

Job Number:



Seq. #:

Machine Or Operation:

Description :

34.0

QC3/5

INSPECT WORK/WING WALK



Comment: INSPECT WORK/WING WALK

DL

06/07/13

(1)

35.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: _____

NP

PO. 6/7/18

36.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06.07.18

Job Completion



U 06.07.17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Mfg / Design Mgr	Approval QC Inspector

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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

NOTE: Date & initial all entries

QA: N/C Closed: _____ Date: _____

DART

DESIGN <i>UP</i>	DRAWN BY <i>P</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA	
CHECKED <i>PH</i>	APPROVED <i>H</i>	DRAWING NO. D2650	REV. E SHEET 1 OF 5
DATE 06.03.30		TITLE 206/407 SKIDTUBE ASSEMBLIES	SCALE NTS
A	97.03.25	NEW ISSUE	
B	97.06.26	AS MANUFACTURED CHANGES	
C	97.10.29	CHANGE HOLE PATTERN AND FRONT END	
D	04.05.17	REDRAW; INCORP. DE09136/9153/9163 MOD GROUND HNDLNG ON D2650-1/-3	
E	06.03.30	RMV C'BORE, CHG DRILL, ADD CHAMFER	

RELEASED

16 04 17 *H*

Qty -1	Qty -3	Qty -5	Qty -7	Part Number	Description
X				D2650-1	SKIDTUBE ASSEMBLY
	X			D2650-3	SKIDTUBE ASSEMBLY
		X		D2650-5	SKIDTUBE ASSEMBLY
			X	D2650-7	SKIDTUBE ASSEMBLY
1	1	1	1	D2600-1-160	EXTRUSION
1				D2654-1	WEB
	1			D2654-3	WEB
		1		D2654-5	WEB
			1	D2654-7	WEB
1	1	1	1	D2646	AFT CAP
1	1	1	1	D2647	CAP
16	17	19	23	D2649	CROSS BOLT SPACER
16	18	14	22	D2651-1	PLUG
16	18	14	22	D2651-3	O-RING
1	1	1	1	D2680-041	NUT PLATE
2	2			D3286-1	DOUBLER
2	2			D3286-3	STUD
42	44	54	60	ALS7-1032-130	INSERT (or AKS4-1032-130, ALS4-1032-130, ALS7-1032-130)
2	2	2	2	AN960JD10L	WASHER
2	2	2	2	CCR264SS3-3	RIVET
2	2	2	2	CR3212-4-03	RIVET
2	2	2	2	MS27039-1-08	SCREW
1	1	1	1	MS27039-4-06	SCREW
1	1	1	1	AN960JD416	WASHER
52	52			CR3212-4-04	RIVET

NOTES

- 1) WELD PER DART QSI 004
- 2) DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 3) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 4) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)
- 5) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
-BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 6) DRILL Ø0.297 FOR ALS7-1032-130 INSERTS USING TEMPLATE DT8056-1 ON -1 TUBE, DT8056-3 ON -3 TUBE, DT8056-5 ON -5 TUBE, AND DT8056-7 ON -7 TUBE. INSTALL INSERTS AFTER FINISH.
- 7) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

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RETURN TO
ENGINEERING
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 27100A

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